Liver and Hepatitis B Information Sheet

LIVER: The liver is the largest organ in the body, weighing about 3 pounds, and is a dark reddish-brown color. It is located in the right side of the body, protected by the rib cage. There are more than 500 functions of the liver! Some of the more important functions are:

* producing bile, a fluid important in digesting fats
* storing glucose and converting it to energy as needed
* removing worn-out red blood cells
* getting rid of toxic (poisonous) waste materials
* creating blood clotting factors and creating immune factors.

It's no wonder that the word "live" is inside the word "liver." Without a healthy liver, a person will eventually die. Many things can harm the liver including alcohol, chemicals and viruses.

Hepatitis B Virus: Hepatitis B is a virus that attacks the liver. Some people with hepatitis B may only experience mild flu-like symptoms, and some may not even know they carry the disease. In other cases, it can cause permanent liver damage and scarring and even death. It is the number one cause of liver cancer in the world. The symptoms include tiredness, poor appetite, yellow skin and eyes (jaundice), nausea, vomiting and abdominal pain. These symptoms may last for months. Every year up to 150,000 persons, mostly young adults, catch hepatitis B. About 5,000 people die each year from the results of hepatitis B infection.

Carrier: Some people who are infected with hepatitis B become "carriers." They can spread the virus without knowing they have it. Carriers are at higher risk of having liver failure later in life. In the United States there are over 1 million people who are carriers of the hepatitis B virus, and about half of them do not even know it.

Seriousness Of Infection: Anyone can get hepatitis B. In fact, one out of every 20 people in the United States has been infected with hepatitis B. For young adults, about 10 of every 100 infected people become hepatitis B carriers. Two to three of these 10 carriers will die from cirrhosis (liver scarring) or liver cancer. Babies who catch hepatitis B from their mothers at birth are seriously affected by this virus; about 90% of babies who become infected at birth become carriers. One in four of these carriers will eventually die from cirrhosis or liver cancer.

Transmission (Spread): The known ways of spreading the virus are:

* at birth, from an infected mother to her baby
* coming in contact with the blood or bodily fluids of an infected person
* living in the same household for a long time with someone who has hepatitis B virus
* injecting drugs with contaminated (dirty) needles

Despite careful interviewing and research, in 30% to 40% of patients in the general population and 60% of adolescent patients the means of transmission is unidentified.

CURE OR PREVENTION: Like most viral illnesses, acute hepatitis B infection has no specific treatment. However, hepatitis B can be prevented by getting the hepatitis B vaccine. The vaccine is given by injection.

The FDA has recently approved a 2-dose hepatitis B dose regimen. For children ages 11-15 years, the adult formulation of ReCombivax HB from Merck is available for use as a two-dose series. Physicians should note on the immunization record whether the two dose or three dose regimen has been administered.

Minimum intervals between 3-dose series:

* The first and second doses of hepatitis B vaccine should be separated by no less than 28 days (4 weeks).
* The second and third doses of hepatitis B vaccine should be separated by no less than 56 days (8 weeks).
* The first and third doses should be separated by no less than four months.
* It is not necessary to restart the series if the interval between doses is longer than what is recommended.
* The third dose should not be given prior to 6 months of age.

Minimum intervals between 2-dose series:

* The second dose should be given 4-6 months after the initial dose.

ADOLESCENTS & PREVENTION: Because of the serious liver disease, cancer and death that could result from hepatitis B infection, adolescents should be immunized to protect them before they enter young adulthood when they are most likely to catch hepatitis B.